

Claims

1. A gas turbine engine comprising a core engine having fluid systems and a fan case region (zone 1) having fluid systems, the fluid systems are connected via pipes and harnesses, the pipes and harnesses are releasable at a disconnect panel, characterised in that the disconnect panel comprises at least two angled portions for routing the pipes and harnesses therethrough, the at least two angled portions providing at least two surfaces for substantially perpendicular intersection with the pipes and harnesses.
2. A gas turbine engine according to claim 1 wherein each of the portions are substantially planar.
3. A gas turbine engine according to claim 1 wherein the disconnect panel comprises a centre portion and two side portions.
4. A gas turbine engine according to claim 1 wherein the at least two angled portions are angled between 10 and 80 degrees relative to one another.
5. A gas turbine engine according to claim 4 wherein the at least two angled portions are angled between 30 and 60 degrees relative to one another.
6. A gas turbine engine according to claim 1 wherein at least one of the portions is arcuate.
7. A gas turbine engine according to claim 6 wherein the least one arcuate portion comprises an end angle relative to the principle plane of other portion, the end angle is between 10 and 80 degrees.
8. A gas turbine engine according to claim 7 wherein the end angle is between 30 and 60 degrees.
9. A gas turbine engine according to claim 1 wherein the disconnect panel comprises a centre portion which is substantially planar and two side portions which are arcuate.
10. A gas turbine engine according to claim 1 wherein the

disconnect panel is a fire wall.

11. A gas turbine engine according to claim 1 wherein the engine comprises a nacelle, when the nacelle enclose the engine it sealably engaged with the disconnect panel.

5 12. A gas turbine engine according to claim 1 wherein the engine comprises a first zone (Zone 3) in the region of the core engine and a second fire zone (Zone 1) in the region of the fan case of the engine the first (Zone 3) and second (Zone 1) fire zones being separated by fire walls; the
10 first fire zone (Zone 3) is located generally radially inwardly of the second fire zone (Zone 1) but includes a bifurcation part which extends radially outwardly of the remainder of the zone for a limited circumferential extent;

wherein the engine further includes the disconnect
15 mounted on the fan case to extend generally radially outwardly therefrom, the member forming a fire wall between the first and second zones and providing means for pipes and harnesses to be routed therethrough.

13. A gas turbine engine according to claim 12 wherein the
20 disconnect panel is mounted to extend downwardly from the fan case, when the engine is in its normal orientation as mounted on an aircraft.

14. A gas turbine engine according to claim 12 wherein, the fan case comprises a rear part, and the disconnect
25 panel is mounted on the rear part.

15. A gas turbine engine according to Claims 4 wherein the disconnect panel further includes a mounting portion, the mounting portion is adapted for attachment to the fan case.

16. A gas turbine engine according to Claim 7 wherein the
30 mounting portion extends back from the mid-portion at a top of the disconnect panel and lies in a plane that is generally perpendicular to the plane of the mid-portion.

17. A gas turbine engine according to Claim 1 wherein the disconnect panel comprises a material that is able to
35 withstand 1100°C for 15 minutes with a standard flame producing $116\text{k W/m}^2 \pm 10\text{kW/m}^2$.

18. A gas turbine engine according to Claim 1, wherein the gas turbine engine further includes a turbine drive shaft, a gearbox and a radial drive, the radial drive connecting the turbine drive shaft to the gearbox mounted on the fan case, the radial drive passing through the fan case.

19. A gas turbine engine according to Claim 18 wherein a bellow-seal is provided between the radial drive and the fan case.

20. A gas turbine engine according to Claim 19 wherein the bellow-seal is fireproof.